

burrows and whether the occurrence of these is correlated with habitat and seasonal stress. Additionally, further observations should be made on captive animals, perhaps under experimentally-modified conditions. However, it seems unlikely that the present observations are anomalous, since Mr. Athol Douglas, of the Western Australian Museum, has informed me that Quendas in his possession have shown similar behaviour.

I am pleased to express my thanks to Dr. George Heinsohn, of the Zoology Department of the University of Western Australia, for permission to make these observations on bandicoots in his care; and to Professor A. R. Main and Mr. Robert Henzel for their helpful criticisms. The study was made while I held a National Science Foundation Graduate Fellowship (U.S.A.). The animal colony is supported by University funds and a CSIRO grant.

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NEPHRURUS STELLATUS,

A NEW KNOB-TAILED GECKO FROM SOUTHERN AUSTRALIA

By G. M. STORR, Western Australian Museum, Perth.

The genus *Nephrurus* occurs in the more arid parts of Australia. In Western Australia, one species (*vertebralis*) extends south to the north-eastern Wheat Belt, and another (*laevissimus*) just reaches the Eastern Goldfields (see map, Storr, 1963 : 86). No member of the genus was known from the intervening region (Merredin to Kalgoorlie) until the recent collection of a specimen east of Southern Cross. This specimen proved to belong to a new species which is otherwise represented by a single specimen from Eyre Peninsula, nearly a thousand miles to the east. For a loan of the latter, I am grateful to Mr. F. J. Mitchell (Curator of Reptiles, South Australian Museum).

The following description is based on the holotype. Where measurements and counts differ in the paratype, they are given in brackets. Differences in scalation and coloration are discussed under Variation.

Nephrurus stellatus sp. nov.

Holotype.—R 28363 in Western Australian Museum, collected by Miss Adrienne Douglas on 15 January 1967 at 41 miles E. of Southern Cross, Western Australia, in Lat. 31 deg. 25 min. S, Long. 120 deg. 00 min. E.

Paratype.—R 8392 in South Australian Museum, collected by M. Smyth on 10 October 1966 near the Hambidge Reserve, Eyre Peninsula, South Australia.

Diagnosis.—Distinguished from all other *Nephrurus* by the numerous white spots on its back.

Description.—Head, tail and ear aperture small for genus. Caudal annuli 13, each with a transverse row of tubercles. Measurements (in mm, those of paratype in brackets): snout-vent length 83.5 (67.0); length and maximum width of head 20.8 and 19.0 (19.2 and 16.1); length and maximum width of tail 24.5 and 6.2 (23.5 and 5.9); length of hindleg 38.0 (35.0); horizontal diameter of eye 6.4 (5.9); length of ear aperture 2.5 (1.8). Upper labials 15 (18). Lower labials 20 (19). Interorbitals 5 (4).



Fig. 1—Holotype of *Nephrurus stellatus* in life.

—Photo Peter Slater

Head scales small, pitted, hexagonal, largest and highest on occiput, smallest and smoothest behind nostrils. Scales on neck uniformly pitted, flat and very small. Ordinary scales on back a little larger, irregularly and sparsely intermixed with two kinds of tubercle: the more common comprising a large, white, erect, sharply pointed, conical scale, surrounded by a ring of small, white, flat scales slightly larger than ordinary dorsals; and the less common consisting only of a dark conical scale a little smaller than those of white tubercles. Caudal tubercles mostly of white kind but differing from those on back by having conical scales higher and sharper (especially dorsolateral series), pointing slightly backwards, and being surrounded by higher and sharper scales. Undersurface uniformly smooth and granular, except towards end of digits where (on upper as well as lower surfaces) scales are strongly imbricate and sharply keeled.

Dorsal ground coloration (in life) reddish brown, darkest on neck and back, palest on head and limbs, and marked with white as follows: a broken transverse line immediately behind occiput; a broken, slightly broader line bowed back on hind-neck; a still broader, but broken, line across shoulders, slightly bowed back, numerous spots on back, flanks, thighs and tail, usually coincident

with a tubercle; a few indistinct spots and short bars on temples; a streak below eye; and a large indistinct spot before eye. On each side of occipito-scapular white lines (but not in contact with them) a broad purplish-brown line; indistinct spots or short bars of same colour on temples, snout and lips. Edge of eyelid yellow. Undersurface white.

Variation—Apart from its small size, the paratype differs from the holotype mainly in coloration. Its white occipito-scapular lines are continuous and much broader; the intervening purplish-brown bands are darker and clearer-cut; and the white dorsal spots tend to align longitudinally. Unlike the holotype, the paratype has a few small tubercles scattered among the granules of the neck, and the ring of scales surrounding dorsal tubercles are considerably larger than the ordinary dorsal scales. The paratype has relatively a much smaller ear aperture than the holotype, and its mental is wider (not narrower) than the rostral and terminates in a lip-like projection.

Comparisons—In the colour pattern of its neck and shoulders and in the structure of its tubercles, *stellatus* is most like *levis* and *vertebralis* but differs from both of those species in having (1) a spotted back; (2) shorter head (33.40 per cent of body-length, against 34.48 in *levis* and 35.46 in *vertebralis*); (3) shorter tail (39.49 per cent of body-length, against 46.71 in *levis* and 47.63 in *vertebralis*); (4) fewer caudal annuli (13, against 15.22 in *levis* and *vertebralis*); (5) few or no tubercles on neck and shoulders; (6) fewer and larger tubercles on back; and (7) fewer tubercles on tail (6.8 on proximal annuli, against 10.12 in *levis* and 8.10 in *vertebralis*).

N. stellatus agrees with *vertebralis* and differs from *levis* in its relatively narrow tail and moderately high and acute scales surrounding the conical scales of white dorsal tubercles. It agrees with *levis* and differs from *vertebralis* in having the caudal tubercles not well-aligned longitudinally and the mental not more than $2\frac{1}{2}$ times as wide as deep.

REFERENCE

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AN ANNOTATED LIST OF ANGIOSPERMS OF LAKESIDE STATION, CUE, WESTERN AUSTRALIA

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INTRODUCTION

In October and December of 1965 the author accompanied Mr E. O. Hellmuth on a series of research trips to Messrs. Clarkson's Station, Lakeside, Cue, Western Australia, and during these visits a collection of plants from the surrounding area was made. Further collections were made in 1966 by Mr. Hellmuth and Mr. B. M. Allender, but these revealed no additional species.

The main collection area was an experimental site approximately 27 miles from Cue townsite and 5 miles from Lakeside Homestead on the track leading from Cue to the homestead. Specimens from nearby Lake Austin are not included in this list, although some plants listed from the experimental area do occur on and near Lake Austin, e.g. *Grevillea sarissa* S. Moore.